

# Basement Pump & Drainage Catalogue



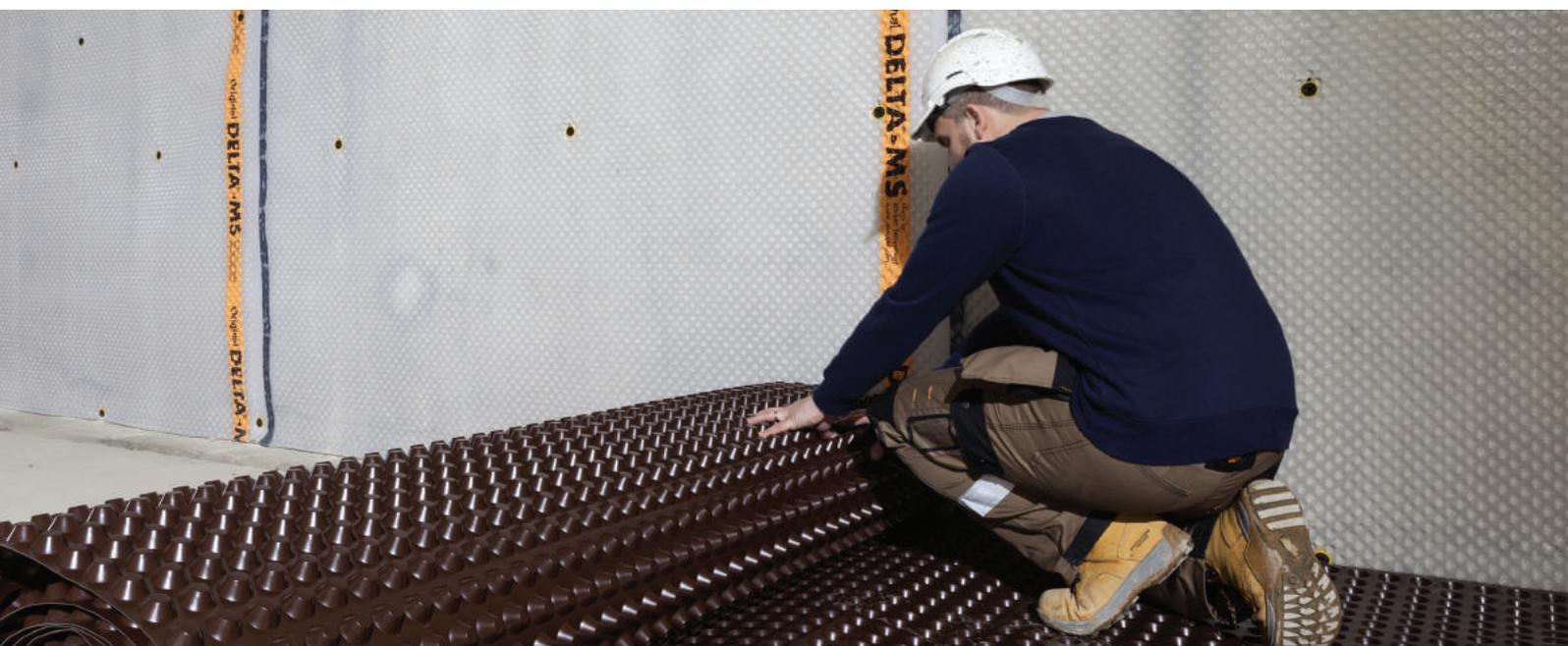
“The Waterproofing People”

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## WHO WE ARE...

We provide the worlds foremost range of products for basement drainage, structural waterproofing and underground wall and floor protection. Turning unused dingy, water damaged or even flooded basements into warm, inviting, usable living space can be easily achieved with our structural waterproofing materials which include drainage, sump pumps and membranes.



## CONTACT DELTA

Delta House  
Merlin Way, North Weald  
Essex, CM16 6HR

Phone: 01992 523 523  
Fax: 01992 523 250  
Email: [info@deltamembranes.com](mailto:info@deltamembranes.com)

## THE DELTA SERVICE

We have a team of application engineers who can assist with selection of ground, surface and foul water pump stations. This can be carried out against drawings, meetings on site and your offices or via net viewer sessions. A waterproofing specialist should be included as part of the design team to create an integrated waterproof solution. The waterproofing specialist should also be responsible for the pumped drainage system.

# DUAL V3 SUMP (DMS-164)



## PRODUCT OVERVIEW

A packaged pump station designed to collect ground water via perimeter channel or 110mm pipes (129 detail) and/or clear opening to the top of the chamber. This chamber can also collect grey water from showers and wash hand basins, but not foul from a WC and should never be mixed. (See 'Delta Foul V3 Sump' [DMS-165](#)). A typical application would be collecting ground water from a 150m<sup>2</sup> basement and surface water from a 12m<sup>2</sup> lightwell.

The Dual V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from HDPE and able to withstand hydrostatic forces encountered in applications with high water tables. The pump station is delivered as a complete package including, chamber, all internal pipe work and two powerful V3 pumps. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing and electrical skills. We also recommend a battery backup ([DMS-280](#)) in case of power outage.



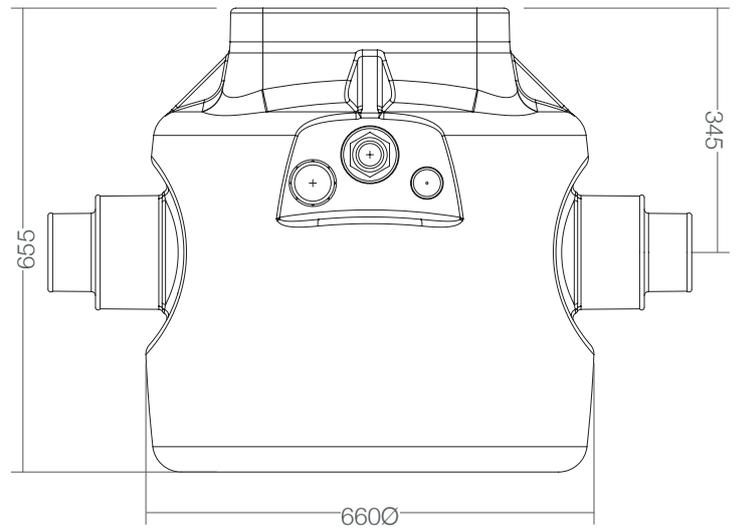
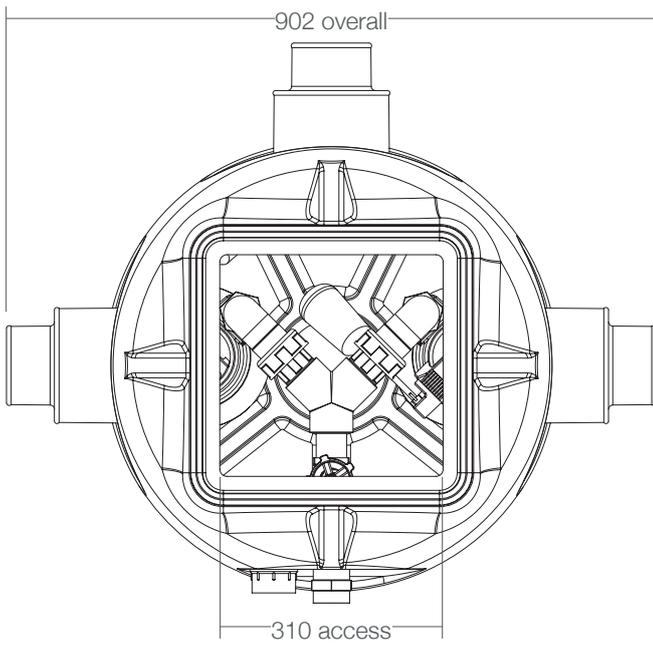
Chamber	Dual V3
Chamber Material	High Density Polyethylene
Volume Below Inlets	87L
Volume Total	217L
Fixed Inlets	3 x 110 / 160mm
Cable Duct	50mm
Discharge Connection	1.25" / 32mm BSP Class C
Discharge Pipework	1.25" / 32mm BSP Class C
Internal Pipework	1.25" / 32mm BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe

## INSTALLATION

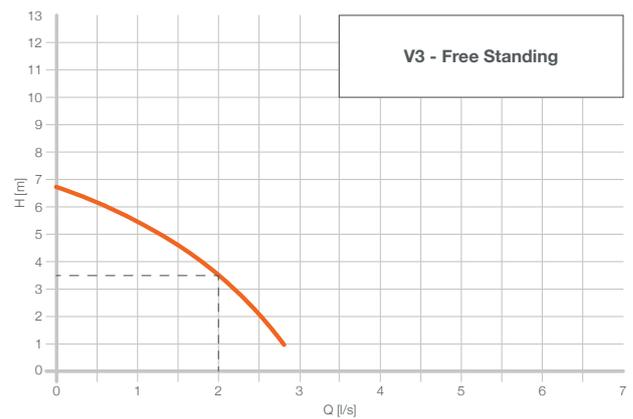
The Dual V3 sump sits on a concrete base. A standard 110mm inlet pipe (if applicable) is connected using a 110mm coupler. A 1.25" / 32mm discharge pipe is run from the chamber to a drain and 50mm cable duct installed with a draw cord. The chamber is filled with water to prevent flotation and back filled with concrete to lock it into structure.

For full installation instructions see 'Delta Dual V3 ([DMS-164](#)) Installation Instructions' on our website. A double sealed man hole cover should be fitted in the final screed, this can be a tray type cover to accept the final floor finish, i.e. tiles or wood.

## TECHNICAL DETAILS



Pump Model	V3
Voltage	230V
KW Rating (P1 / P2)	0.43 / 0.18kW
Full Load Current	1.9A
Fuse Spur Rating	13A
Typical Duty	2.0l/s @ 3.5m
Power Phase	Single
Weight	5.64kg



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



PowerMaxx Battery Backup (DMS-280)

# DUAL V3.1 SUMP (DMS-166)



## PRODUCT OVERVIEW

A packaged pump station designed to collect ground water via perimeter channel or 1 x 110mm pipes (129 detail) and/or clear opening to the top of the chamber. This chamber can also collect grey water from showers and wash hand basins, but not foul from a WC and should never be mixed. (See 'Delta Foul V3 Sump' [DMS-165](#)). This model is ideal for jobs where one or less 110mm inlet is required and space is limited. A typical application would be collecting ground water from a 150m<sup>2</sup> basement and surface water from a 12m<sup>2</sup> lightwell.

The Dual V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from HDPE and able to withstand hydrostatic forces encountered in applications with high water tables. The pump station is delivered as a complete package including, chamber, all internal pipe work and two powerful V3 pumps. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing and electrical skills. We also recommend a battery backup ([DMS-280](#)) in case of power outage.



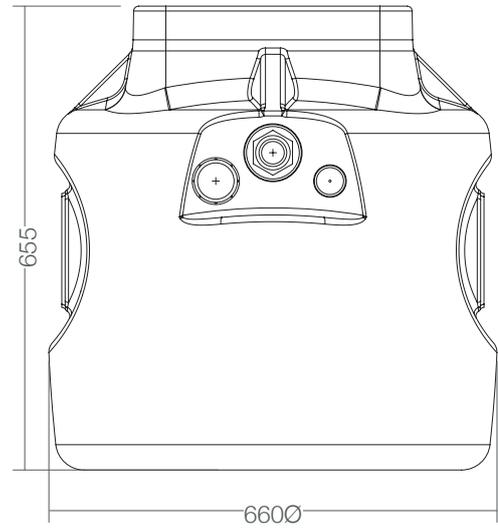
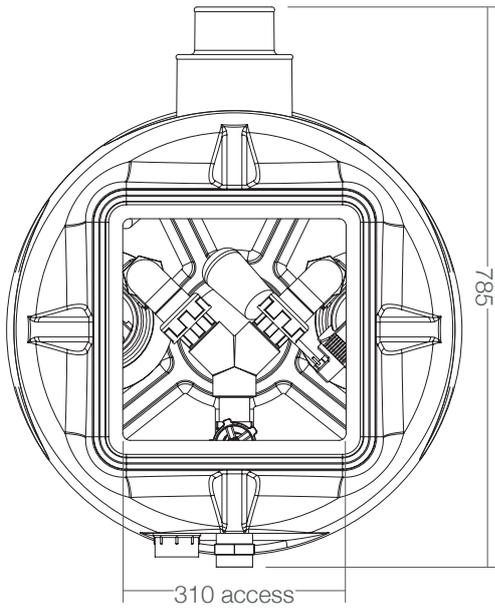
Chamber	Dual V3.1
Chamber Material	High Density Polyethylene
Volume Below Inlets	87L
Volume Total	217L
Fixed Inlets	3 x 110 / 160mm
Cable Duct	50mm
Discharge Connection	1.25" / 32mm BSP Class C
Discharge Pipework	1.25" / 32mm BSP Class C
Internal Pipework	1.25" / 32mm BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe

## INSTALLATION

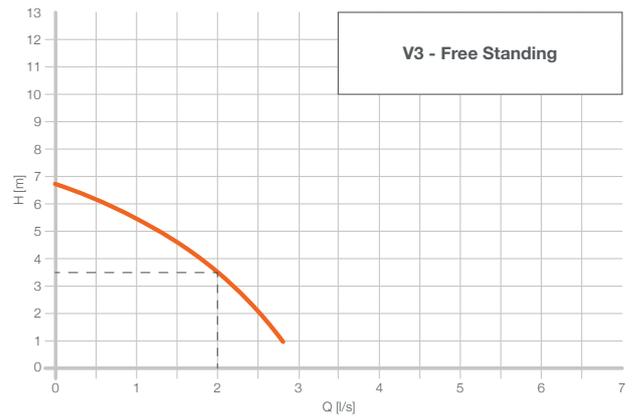
The Dual V3.1 sump sits on a concrete base. A standard 110mm inlet pipe (if applicable) is connected using a 110mm coupler. A 1.25" / 32mm discharge pipe is run from the chamber to a drain and 50mm cable duct installed with draw cord. The chamber is filled with water to prevent flotation and back filled with concrete to lock into structure.

For full installation instructions see 'Delta Dual V3 ([DMS-164](#)) Installation Instructions' on our website. A double sealed man hole cover should be fitted in the final screed, this can be a tray type cover to accept the final floor finish, i.e. tiles or wood.

## TECHNICAL DETAILS



Pump Model	V3
Voltage	230V
KW Rating (P1 / P2)	0.43 / 0.18kW
Full Load Current	1.9A
Fuse Spur Rating	13A
Typical Duty	2.0l/s @ 3.5m
Power Phase	Single
Weight	5.64kg



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



PowerMaxx Battery Backup (DMS-280)

# FOUL V3 SUMP (DMS-165)



## PRODUCT OVERVIEW

A packaged pump station designed to collect foul water from basements and ground floor extensions where other facilities in the property discharge via gravity. A typical application would be the collection and discharge of foul water from a basement fitted with a bathroom and utility room. This pump station is not designed to collect ground water from a cavity membrane system (see Dual V3 Sump, [DMS-164](#)). For kitchen applications, we recommend fitting a grease trap prior to the pump station.

The Foul V3 pump station has been specifically designed for below ground applications. The chamber is manufactured from virgin tank grade HDPE and is able to withstand hydrostatic forces encountered in applications with high water tables. The pump station is delivered as a complete package with all internal pipe work and a 612SA foul vortex pump. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing & electrical skills.



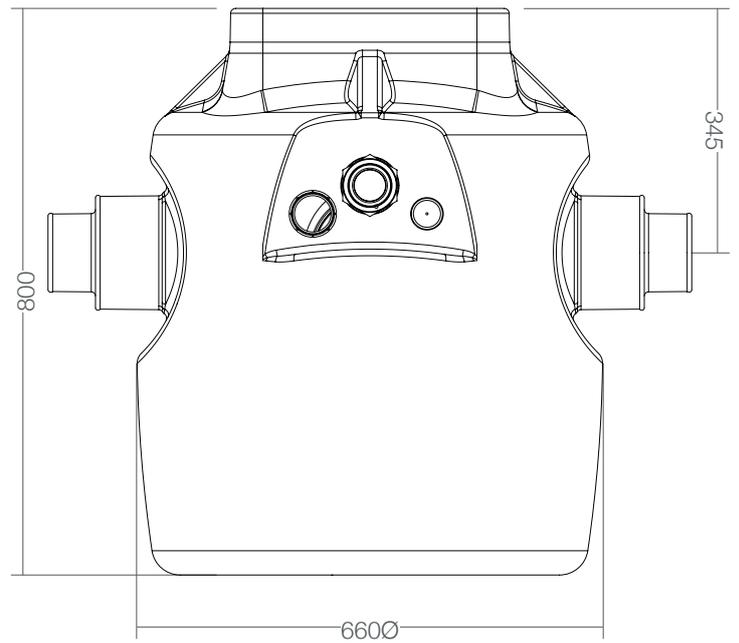
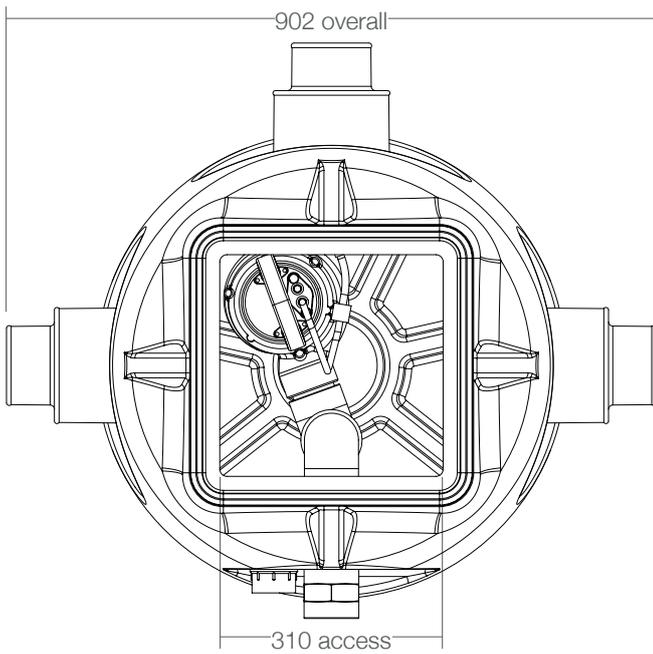
Chamber	Foul V3
Chamber Material	High Density Polyethylene
Volume Below Inlets	137L
Volume Total	273L
Fixed Inlets	3 x 110 / 160mm
Cable Duct	50mm
Discharge Connection	2" / 50mm BSP Class C
Discharge Pipework	2" / 50mm BSP Class C
Internal Pipework	2" / 50mm BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe
Vent Pipework	2" / 50mm White Waste Pipe

## INSTALLATION

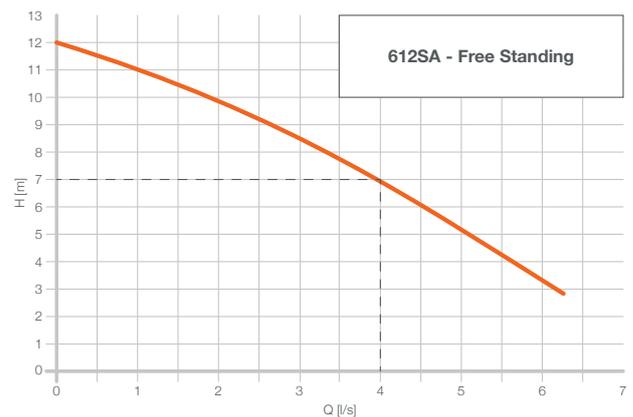
The Foul V3 sump sits on a concrete base. Standard 110mm inlet pipes are connected using a 110mm coupler. A 2" / 50mm discharge pipe is run from the chamber to a drain, 50mm cable duct installed with draw cord and 50mm vent run to high level or SVP. The chamber is filled with water to prevent flotation and back filled with concrete to lock it into structure.

For full installation instructions see 'Delta Foul V3 ([DMS-165](#)) Installation Instructions' on our website. A double sealed man hole cover should be fitted in the final screed, this can be a tray type cover to accept the final floor finish, i.e. tiles or wood.

## TECHNICAL DETAILS



Pump Model	612SA
Voltage	230V
KW Rating (P1 / P2)	1.25 / 0.75kW
Full Load Current	6.0A
Fuse Spur Rating	13A
Typical Duty	7.0l/s @ 7m
Power Phase	Single
Weight	22kg



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



Hi-PowerMaxx Battery Backup (DMS-364)

# SINGLE V3 SUMP (DMS-047 & 107)



## PRODUCT OVERVIEW

The standard Single V3 (DMS-047) packaged pump station is designed to collect ground water from a Delta cavity membrane system through the clear opening to the top of the chamber. This pump station would be selected where no running water is present or expected and therefore is for protection only, i.e. for non-perishable areas.

The Single V3 sump with inlets (DMS-107) allows for one or two 110mm pipes to be connected into the side of the chamber, we recommend taking advice from one of our technical support engineers before selecting this product.

The Delta Single V3 pump station has been specifically designed for below ground applications. The pump station is delivered as a complete package including, chamber, all internal pipe work and one powerful Delta V3 pump.



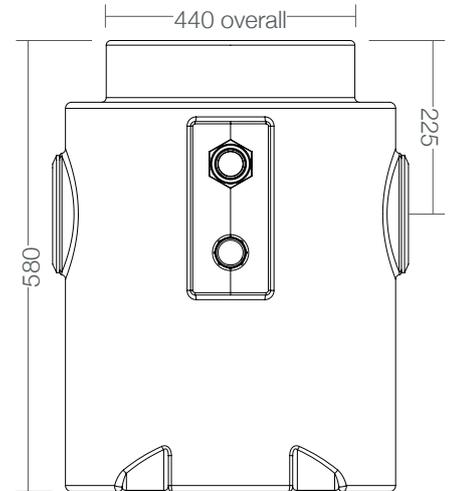
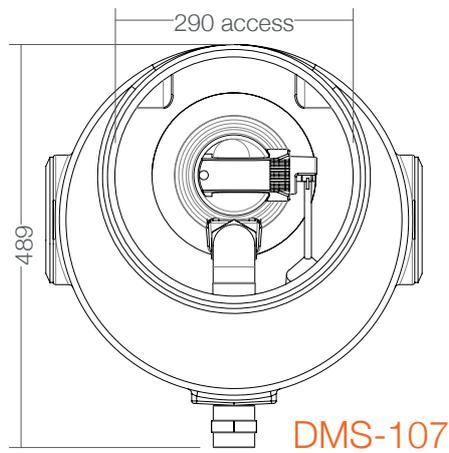
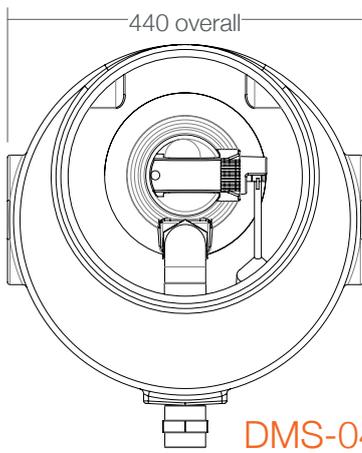
Chamber	Single V3
Chamber Material	High Density Polyethylene
Volume Below Inlets	40L
Volume Total	80L
Fixed Inlets	2 x 110 / 160mm
Cable Duct	32mm
Discharge Connection	1.25" / 32mm BSP Class C
Discharge Pipework	1.25" / 32mm BSP Class C
Internal Pipework	1.25" / 32mm BSP Class C
Cable Duct Pipework	1.25" / 32mm White Waste Pipe

## INSTALLATION

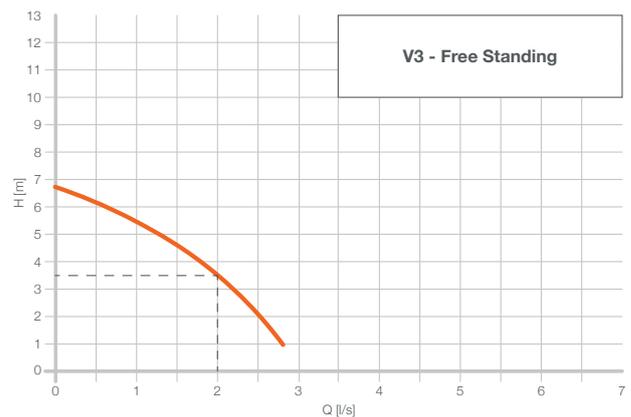
The Single V3 sits on a concrete base. Perimeter channel can be connected through the side at the top of the chamber and standard 110mm inlet pipe is connected using a 110mm rubber seal. A 1.25" / 32mm discharge pipe is run from the chamber to a drain and 50mm cable duct installed with draw cord. The chamber is filled with water to prevent flotation and back filled with concrete to lock it into the structure.

A double sealed man hole cover should be fitted in the final screed, this can be a tray type cover to accept the final floor finish, i.e. tiles or wood.

## TECHNICAL DETAILS



Pump Model	V3
Voltage	230V
KW Rating (P1 / P2)	0.43 / 0.18kW
Full Load Current	1.9A
Fuse Spur Rating	13A
Typical Duty	2.0l/s @ 3.5m
Power Phase	Single
Weight	5.64kg



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



PowerMaxx Battery Backup (DMS-280)

# DUAL V4/V6 SUMP (DMS-217 & 079)



## PRODUCT OVERVIEW

The Dual V4 & V6 are upgrades to the standard Dual V3 where higher discharge heads are required. Typically, for double and triple depth basements or where long discharge runs are required resulting in higher than normal pipe work losses.

The Dual V4 and V6 are also suitable for picking up ground water from a surface area larger than 150m<sup>2</sup> or basements that require a head height higher than 3m. The Dual V4 and V6 can pump 12m<sup>2</sup> of surface area in addition to groundwater.

The Dual V4 and V6 has been specifically designed for below ground applications. The chamber is manufactured from HDPE and is able to withstand hydrostatic forces encountered in applications with high water tables. The pump station is delivered as a complete package including chamber, all internal pipe work and two powerful V4 or V6 pumps. A high level alarm is offered as a recommended option. It is designed to be installed by contractors with competent building, plumbing and electrical skills. We also recommend a battery backup (DMS-280) in case of power outage.



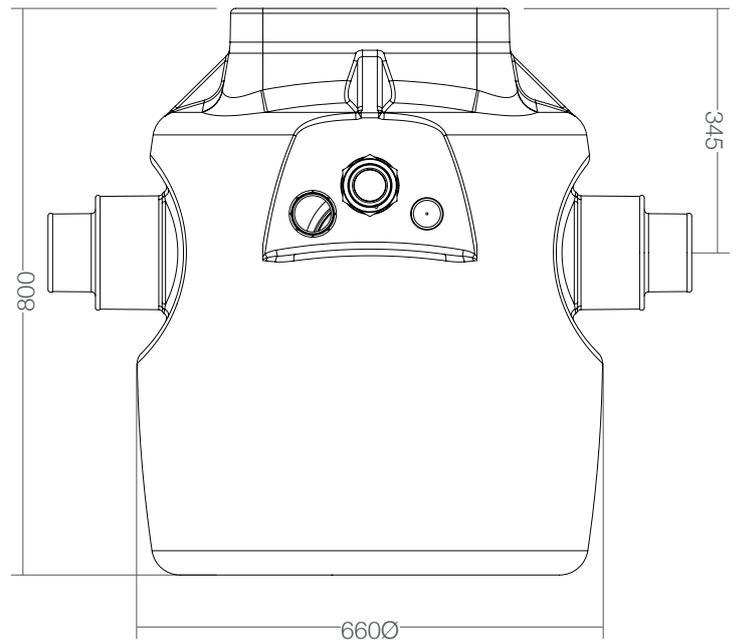
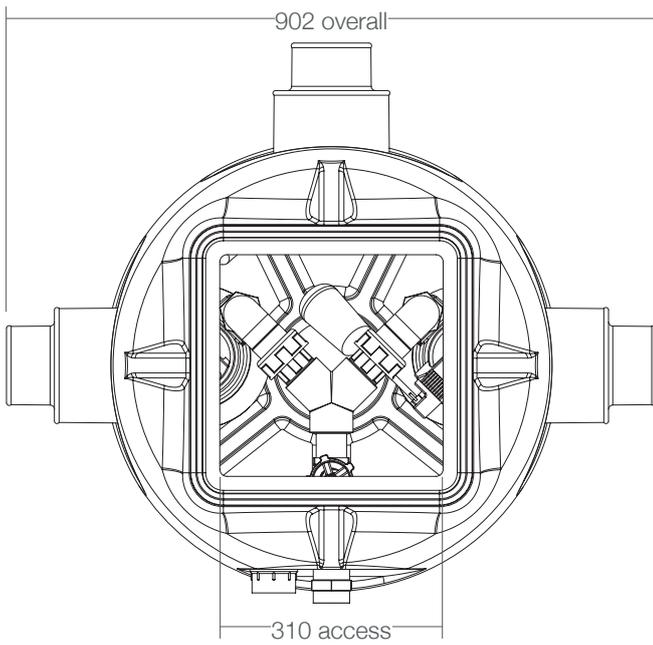
Chamber	Dual V4/V6
Chamber Material	High Density Polyethylene
Volume Below Inlets	137L
Volume Total	273L
Fixed Inlets	3 x 110 / 160mm
Cable Duct	50mm
Discharge Connection	2" / 50mm BSP Class C
Discharge Pipework	2" / 50mm BSP Class C
Internal Pipework	1.25" / 32mm BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe
Vent Pipework	2" / 50mm White Waste Pipe

## INSTALLATION

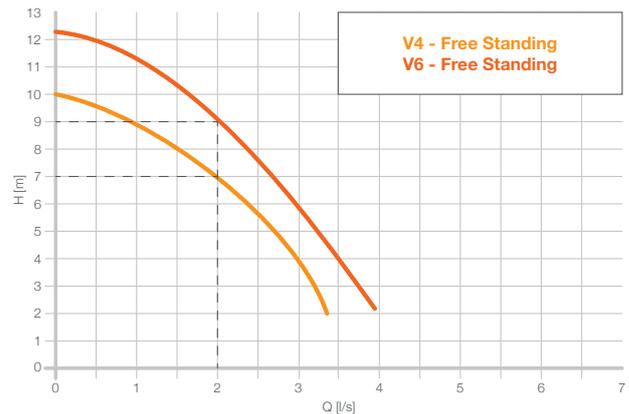
The Dual V4/V6 sump sits on a concrete base. A standard 110mm inlet pipe (if applicable) is connected using a 110mm coupler. A 2" / 50mm discharge pipe is run from the chamber to a drain and 50mm cable duct installed with a draw cord. The chamber is filled with water to prevent flotation and back filled with concrete to lock it into structure.

For full installation instructions, see 'Delta Dual V4/V6 Installation Instructions' on our website. A double sealed man hole cover should be fitted in the final screed, this can be a tray type cover to accept the final floor finish, i.e. tiles or wood.

## TECHNICAL DETAILS



Pump Model	V4	V6
Voltage	230V	230V
KW Rating (P1 / P2)	0.75 / 0.36kW	1.05 / 0.50kW
Full Load Current	4.0A	4.9A
Fuse Spur Rating	13A	13A
Typical Duty	2.0l/s @ 7m	2.0l/s @ 9m
Power Phase	Single	Single
Weight	6.7kg	6.9kg



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



Hi-PowerMaxx Battery Backup (DMS-364)

# 800X1300 CHAMBER GROUND, FOUL, SURFACE



## PRODUCT OVERVIEW

The 800Ø x 1300mm deep chamber is typically used where inverts are required to be deeper than the standard Delta Dual V3, V4 & V6 & Foul V3 (345mm from cover level). For example in buildings where drainage runs are long or drainage is running below floor slabs 250mm or thicker. Inverts can be up to 775mm from top of structural slab.

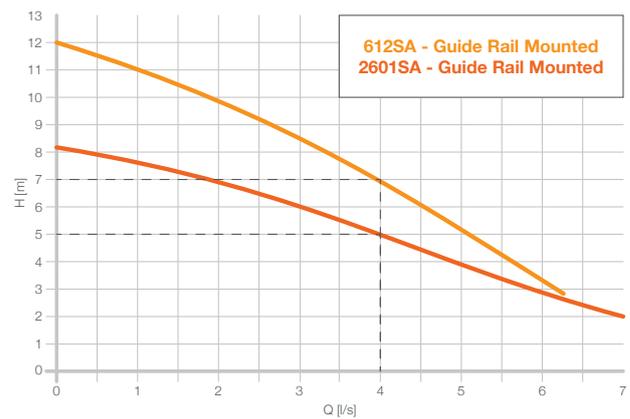
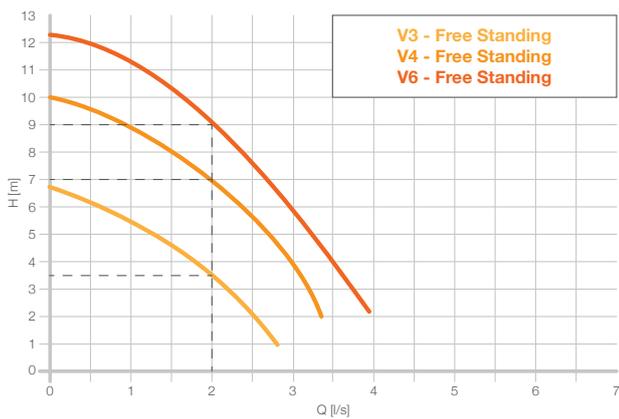
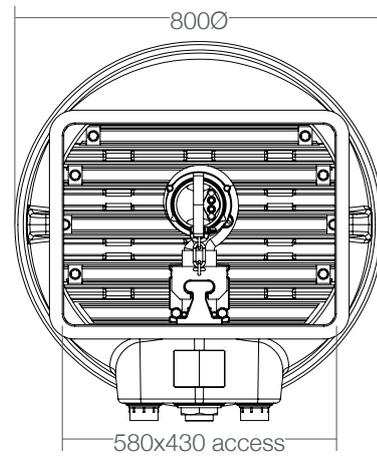
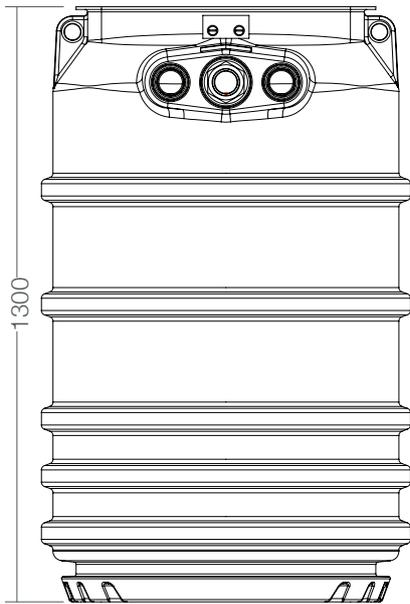
These chambers can collect ground, foul or surface water, dependent on the pump used, but not in the same chamber.



Chamber	800 Series
Chamber Material	High Density Polyethylene
Volume Total	560L
Inlets	5 x 110mm grommets (loose)
Cable Duct	50mm
Discharge Connection	BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe
Vent Pipework	2" / 50mm White Waste Pipe

Chamber	Typical Duty	Usage	Solids	Pump Fitting	Pump	UPPS	Control
2-800-1300-V3	2.0l/s @ 3.5m	Ground Water	10mm	Free Standing	V3	PowerMaxx	AlertMaxx
2-800-1300-V4	2.0l/s @ 7m	Ground Water	10mm	Free Standing	V4	Hi-PowerMaxx	AlertMaxx
2-800-1300-V6	2.0l/s @ 9m	Ground Water	10mm	Free Standing	V6	Hi-PowerMaxx	AlertMaxx
1-800-1300-612SA	4.0l/s @ 7m	Foul Water	50mm	Guide Rail	612SA	Hi-PowerMaxx	AlertMaxx
1-800-1300-2601SA	4.0l/s @ 5m	Foul Water	65mm	Guide Rail	2601SA	Hi-PowerMaxx	AlertMaxx
2-800-1300-612SA	4.0l/s @ 7m	Foul Water	50mm	Guide Rail	612SA	Hi-PowerMaxx	AlertMaxx

## TECHNICAL DETAILS



## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)



MessageMaxx Telemetry (DMS-279)



Hi-PowerMaxx Battery Backup (DMS-364)

# 800 SERIES CHAMBERS GROUND, FOUL, SURFACE



## PRODUCT OVERVIEW

- Available in depths of 800mm, 1000mm, 1300mm, 1500mm, 1800mm & 2000mm from stock.
- Applications including ground, surface and foul water.
- Accepts single & dual, guide rail or free standing pumps up to 50mm solids handling for dual & 65mm for single applications.
- Inlets can be cut to suit with kit provided.
- Designed for applications where high hydrostatic pressures are present.
- Dedicated position for cable duct & vent.
- Manufactured from tank grade ICO 1314 virgin polyethylene.
- Accepts standard 450mm x 600mm covers or larger.



Chamber	800 Series
Chamber Material	High Density Polyethylene
Available Pumps	V3, V4, V6, 2500, 612, 2502, 2503, 2601, 2602, 2603, 2308, 2309
Inlets	5 x 110mm grommets (loose)
Cable Duct	50mm
Discharge Connection	BSP Class C
Cable Duct Pipework	2" / 50mm White Waste Pipe
Vent Pipework	2" / 50mm White Waste Pipe

## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)

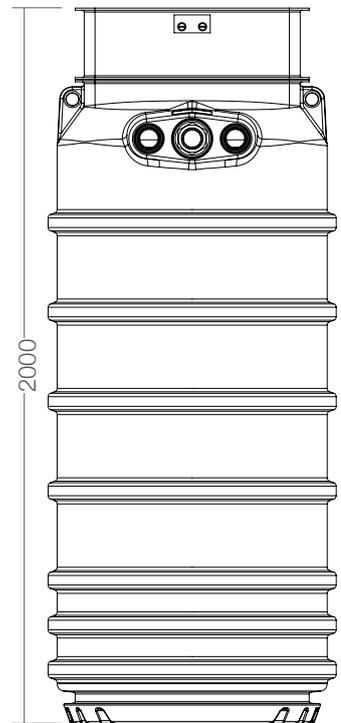
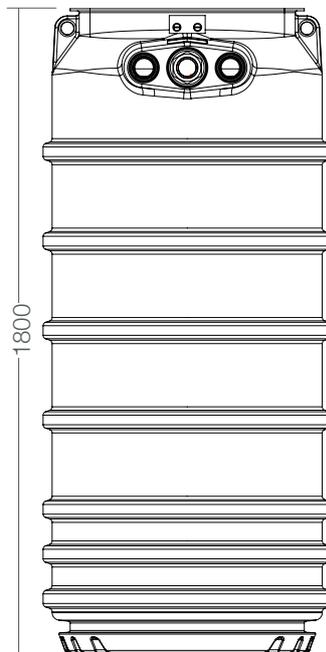
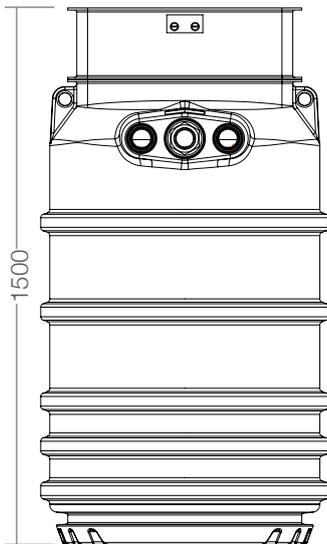
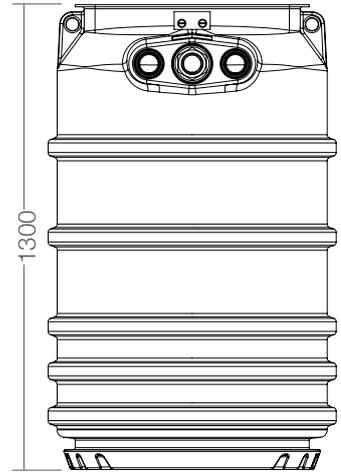
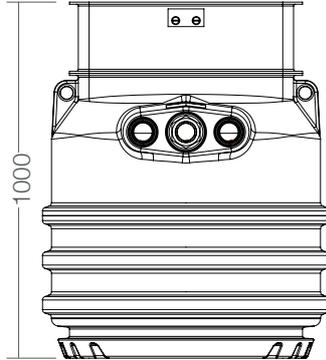
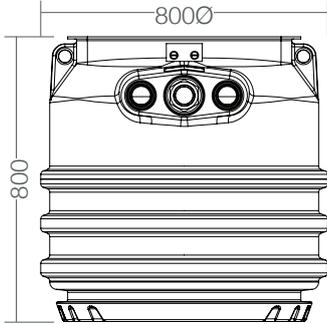


MessageMaxx Telemetry (DMS-279)



Hi-PowerMaxx Battery Backup (DMS-364)

# TECHNICAL DETAILS

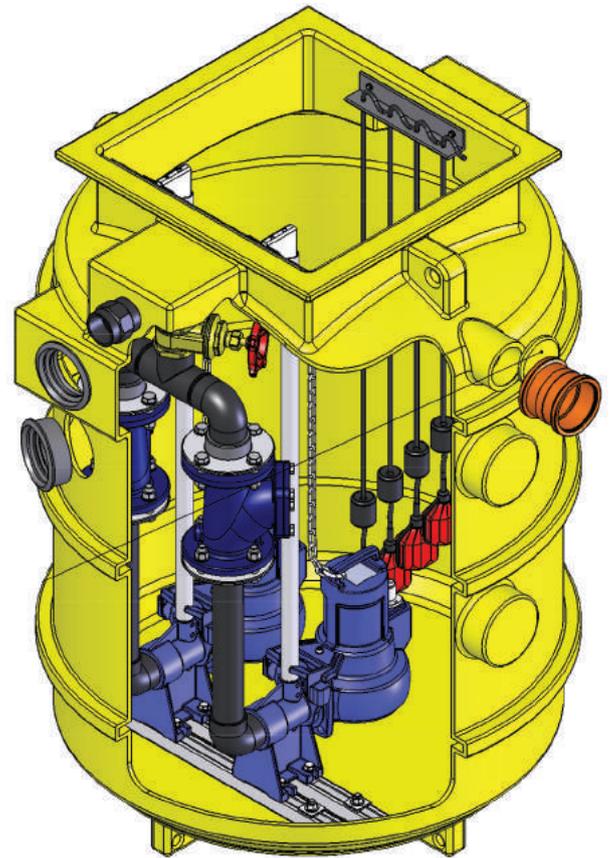


# 1160 SERIES CHAMBERS GROUND, FOUL, SURFACE



## PRODUCT OVERVIEW

- Available in depths 1140mm, 1540mm, 1940mm & 2440mm from stock (3000-5000mm to special order).
- Applications including ground, surface and foul water.
- Accepts single & dual, guide rail or free standing pumps up to 65mm solids handling for dual & 80mm for single applications.
- Pre-installed 110mm & 160mm bosses for inlets.
- Additional inlets can be cut to suit with kit provided.
- Designed for applications where high hydrostatic pressures are present.
- Manufactured from tank grade ICO 1314 virgin polyethylene.
- Accepts standard 600mm x 600mm covers.



Chamber	1160 Series
Chamber Material	High Density Polyethylene
Available Pumps	2500, 612, 2502, 2503, 2601, 2602, 2603, 2308, 2309, 656
Inlets	110mm & 160mm bosses
Cable Duct	110mm
Discharge Connection	BSP Class C
Cable Duct Pipework	110mm Drainage
Vent Pipework	110mm Drainage

## ACCESSORIES



AlertMaxx High Level Alarm (DMS-270)

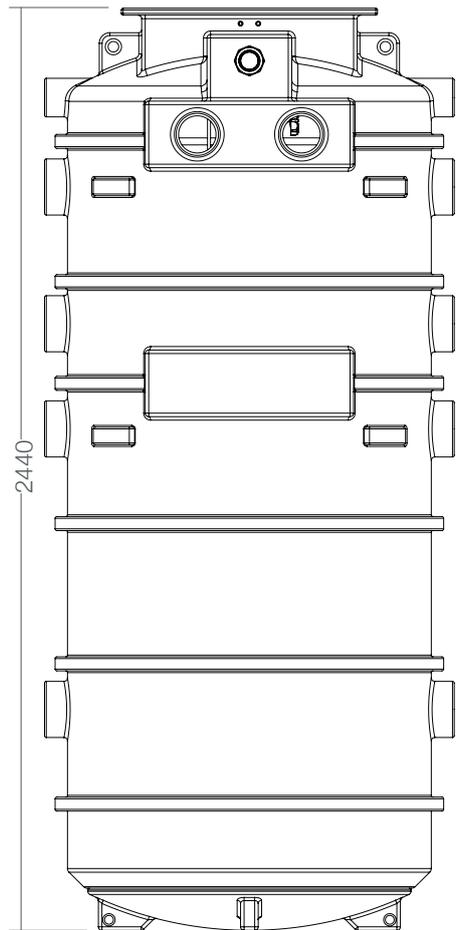
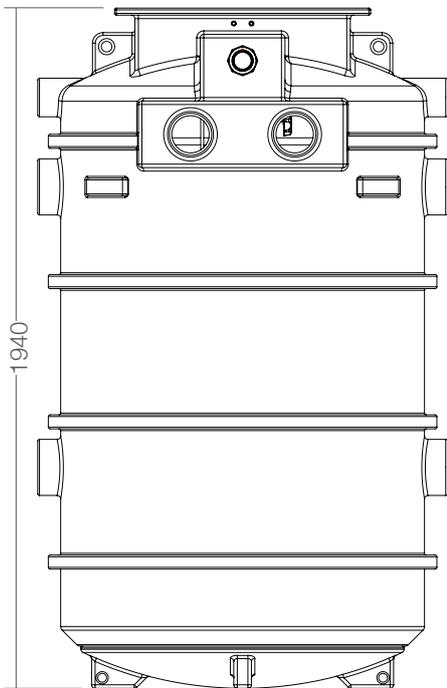
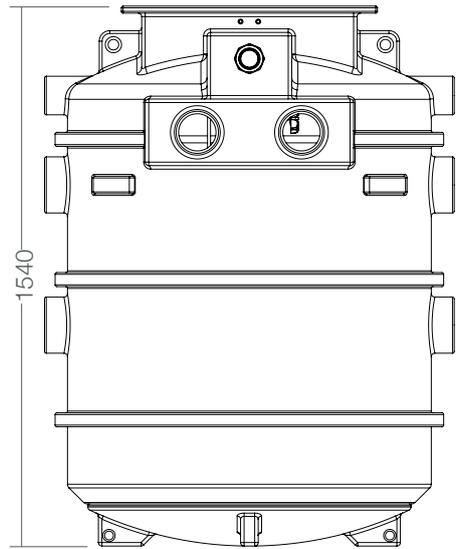
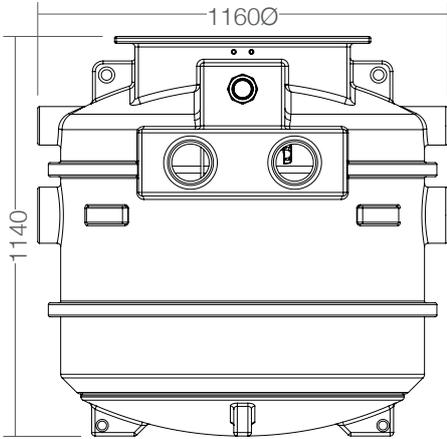


MessageMaxx Telemetry (DMS-279)



Hi-PowerMaxx Battery Backup (DMS-364)

# TECHNICAL DETAILS



# MAXXCONNECT FAMILY



## OVERVIEW

The MaxxConnect family is a range of products specifically designed for the pump industry. An intelligent approach towards design has resulted in optimum functionality, maximum efficiency and ease of installation. Important data can be retrieved remotely.

### INFO, WARNING & CRITICAL MESSAGES RECEIVED TO FIVE PHONES



### WHY INTRODUCE THIS RANGE?

It offers total peace of mind and if the unimaginable occurs, the pump stations will warn when a problem arises. In a basement environment the consequences may be catastrophic and could mean the difference between an expensive insurance claim for water damage or not.



## ALERTMAXX (DMS-269/270)

An innovative, independent high level alarm powered by 240V with a 6V battery backup in case of power failure. In its basic format it is easy to install, requiring just two fixings and connection of mains power and float switch. Status for All OK, high water alarm, previous cancelled alarms, mains failure & service required are clearly displayed via simple LED language. Volt free contacts are included as standard where connectivity to a building management systems is required. The AlertMaxx is available to suit two applications - foul water (DMS-269) and ground water (DMS-270).



## MESSAGEMAXX (DMS-279)

For total peace of mind the MessageMaxx is combined with the AlertMaxx to give remote monitoring when clients are away from their property. Messages are sent to predetermined phone numbers using GSM technology and are received in text format. Installation is simple requiring just two fixings and connection to the AlertMaxx via one cable, no external power is required and back up in case of mains failure comes from the battery fitted in the AlertMaxx. Status for All OK, high water alarm, previous cancelled alarms, mains failure & service required are clearly displayed via a simple LED language and mimics the AlertMaxx. Order code **DMS-279**



## AWAREMAXX (DMS-297)

AwareMaxx is a remote buzzer box that is compatible with the AlertMaxx High Level Alarm. Offering easy installation and a loud 120db internal siren, the AwareMaxx is connectable via volt free contacts within the AlertMaxx using any standard two core flex. No external power source is required as power is fed directly from the internal 6V battery of the AlertMaxx. The AwareMaxx can be positioned up to 50m away from the AlertMaxx for maximum audibility in the area where it is needed most. Order code **DMS-297**



# POWERMAXX (DMS-280)

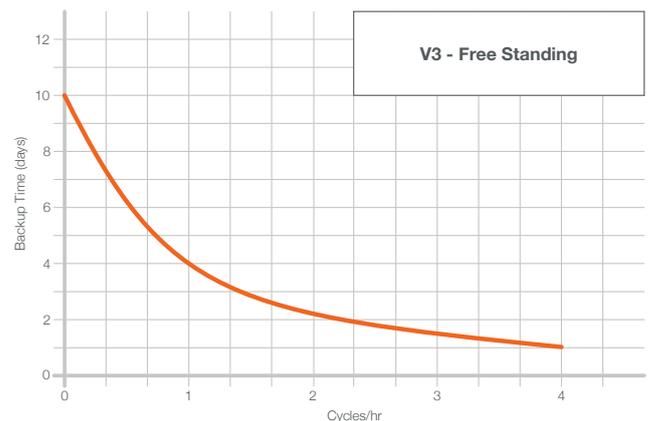


## PRODUCT OVERVIEW

PowerMaxx is specifically designed for pump applications. It can run 2 x V3 ground water pumps without mains power for up to 4 days depending on number of cycles/hr, sits in standby mode for at least 10 days and is virtually inaudible. 1 or 2 pumps are directly fed through the PowerMaxx. If power failure occurs, the pump/s automatically take power from the PowerMaxx which will have been fully charged during mains operation. The PowerMaxx will automatically recharge when mains power returns. Installation is simple, The PowerMaxx is free standing and can be installed in any dry ventilated area. As this unit is fitted in the power line, no additional electrical spurs are required. The PowerMaxx is part of the MaxxConnect family and can operate as a standby unit or can be used in conjunction with AlertMaxx & MessageMaxx. It can also be used as a direct replacement for previous versions.



Size (without cable glands)	155mm x 425mm x 300mm
Weight (without battery installed)	6.5kg
Weight (with battery installed)	19.5kg
Mains supply	200-250V AC (50Hz)
Internal batteries	24V - 1x22Ah
Power (standby)	<3W
Peak Power Handling	600W P1
Power (charging)	55W
Visual display	Red, Blue, Green LED
Operating temperature	5-35°C
Approximate installation time	30 minutes
Warranty	2 years



# POWERMAXX+ (DMS-365)

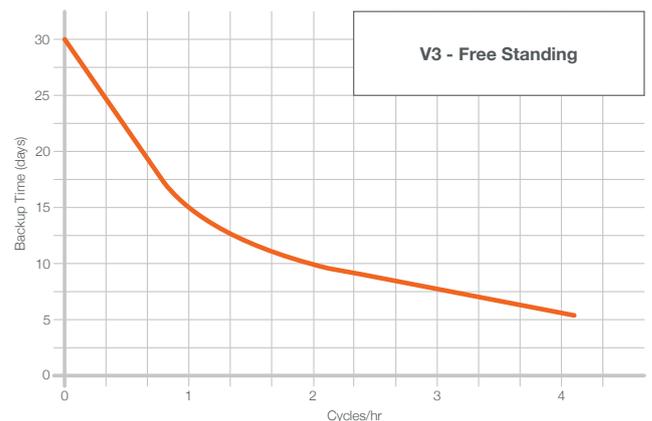


## PRODUCT OVERVIEW

PowerMaxx+ is specifically designed for pump applications and has an increased resilience on the PowerMaxx battery backup. PowerMaxx+ can run 2 x V3 ground water pumps without mains power for 15 days depending on number of cycles/hr, sits in standby mode for up to 30 days and is virtually inaudible. 1 or 2 pumps are directly fed through the PowerMaxx+. If power failure occurs, the pump/s automatically take power from the PowerMaxx+ which will have been fully charged during mains operation. The PowerMaxx+ will automatically recharge when mains power returns. Installation is simple, the PowerMaxx+ is bolted together with a double chassis lid fitted and three batteries interconnected. As this unit is fitted in series between the spur and the pump, no additional electrical spurs are required. The PowerMaxx+ is part of the MaxxConnect family and can operate as a standby unit or can be used in conjunction with the AlertMaxx & MessageMaxx. It can also be used as a direct replacement for previous versions.



Size (without cable glands)	315mm x 425mm x 300mm
Weight (without batteries installed)	10kg
Weight (with batteries installed)	49kg
Mains supply	200-250V AC (50Hz)
Internal batteries	24V - 3x22Ah Total = 66Ah
Power (standby)	<3W
Peak Power Handling	600W P1
Power (charging)	55W
Visual display	Red, Blue, Green LED
Operating temperature	5-35°C
Approximate installation time	30 minutes
Warranty	2 years



# HI-POWERMAXX (DMS-364)

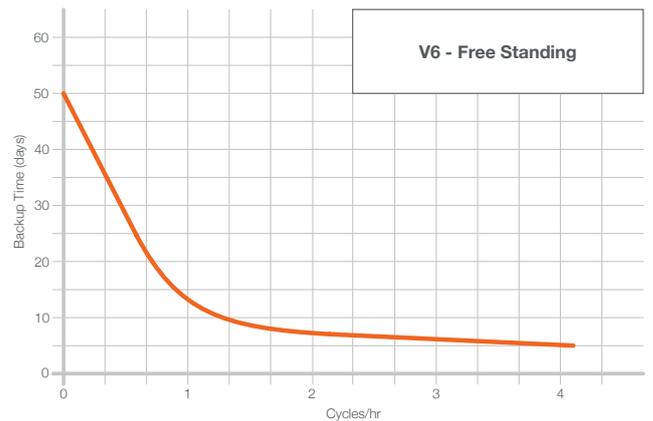


## PRODUCT OVERVIEW

Hi-PowerMaxx is specifically designed for pump applications. It provides battery backup for larger pumps such as the V4, V6, 612SA & 2601SA, sits in standby mode for up to 50 days and is virtually inaudible. 1 or 2 pumps are directly fed through the Hi-PowerMaxx and can provide 13 days pump time based on 1 cycle/hr of a V6 pump. If power failure occurs, the pump/s automatically take power from the Hi-PowerMaxx which will have been fully charged during mains operation. The Hi-PowerMaxx will automatically recharge when mains power returns. Installation is simple, the Hi-PowerMaxx is free standing and can be installed in any dry ventilated area. As this unit is fitted in series between the spur and the pump, no additional electrical spurs are required. The Hi-PowerMaxx is part of the MaxxConnect family and can operate as a standby unit or can be used in conjunction with the AlertMaxx & MessageMaxx. It can also be used as a direct replacement for previous versions.



Size (without cable glands)	475mm x 425mm x 300mm
Weight (without batteries installed)	15.5kg
Weight (with batteries installed)	80.5kg
Mains supply	200-250V AC (50Hz)
Internal batteries	24V - 5x22Ah Total = 110Ah
Power (standby)	<3W
Peak Power Handling	2000W P1
Power (charging)	55W
Visual display	Red, Blue, Green LED
Operating temperature	5-35°C
Approximate installation time	30 minutes
Warranty	2 years



# CONTROL PANELS STANDARD & BESPOKE



## STANDARD PRODUCT OVERVIEW

Delta offer a range of panels to control duplex pumps via 4 floats (stop, start, assist and high level alarm). Options include volt free contacts for high level alarm, pump trip, land and SIM based telemetry and facility to interconnect to a BMS system or the Maxx Family range.



## BESPOKE PRODUCT OVERVIEW

We can supply a range of bespoke control panels for your particular needs with options such as, pump hour and run counter, compartmental and waterproof.

Code	Description	Size	Phase
CP-01	Dual Control Panel 4-6amp	400W x 200D x 500Hmm	Single
CP-02	Dual Control Panel 6-10amp	400W x 200D x 500Hmm	Single
CP-03	Dual Control Panel 4-6amp	400W x 200D x 500Hmm	Three
CP-04	Dual Control Panel 6-10amp	400W x 200D x 500Hmm	Three
CP-05	Single Control Panel 4-6amp	300W x 200D x 400Hmm	Single
CP-06	Single Control Panel 6-10amp	300W x 200D x 400Hmm	Three



# DELTA DRAINAGE CHANNEL



## DMS-208 (WITHOUT UPSTAND)

Delta **DMS-208** channel without upstand is for off-wall or across floor applications.



## DMS-207 (WITH UPSTAND)

Delta **DMS-207** channel with upstand is for perimeter wall applications.



# DELTA DRAINAGE FITTINGS



## PRODUCT OVERVIEW

The Delta system also come with four different connectors, which compliment the system and make it quick and easy to install. These are push fit but can be solvent welded if required.



Corner Connector (DMS-182)  
This fits internal and external corners to channel lengths and has a push-out eye for a jetting point APU (DMS-094).



Straight Connector (DMS-310)  
This connector fits channel lengths together to create longer runs.



T Piece Connector (DMS-183)  
This connector joins three pieces of channel together for use when an across floor piece needs to join a off-wall piece.



End Cap (DMS-184)  
These ends caps are used to blank off ends of channel runs. They are also used to reduce the discharge to 40mm diameter before entering the sump. This is done with a standard low pressure waste pipe which is solvent welded on to the adaptor.



Jetting Eye (DMS-094)  
Jetting eyes can be installed onto the easy push out connectors using solvent weld. These are used for easy access maintenance of the channels by water jetting any blockages. It is a requirement to incorporate flushing points (Jetting Eyes) to comply with BS8102:2009 as part of the drainage design. These are normally placed at major changes in direction of walling.



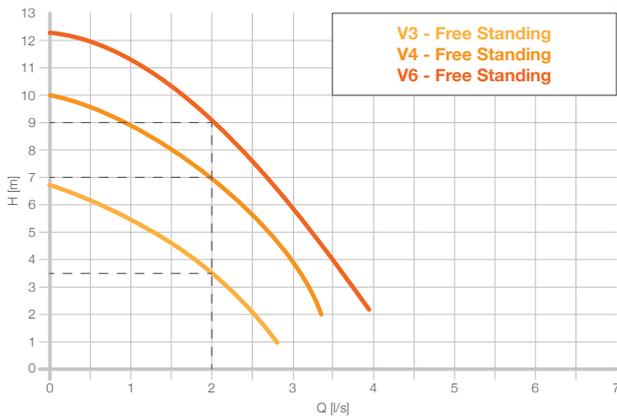
# PUMP PERFORMANCE



## PRODUCT OVERVIEW

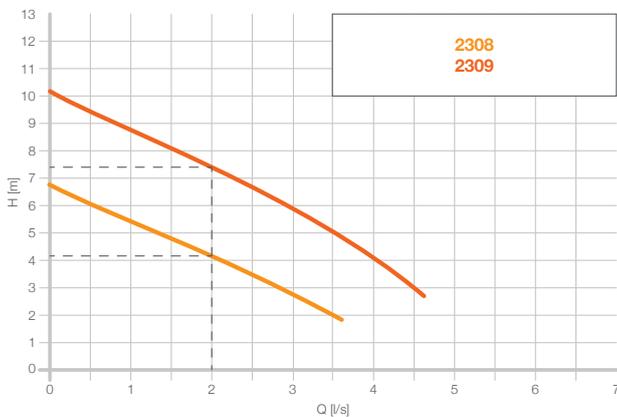
A range of drainage and sewage pumps fitted to our standard V3 products as well as the larger 800 & 1160 series bespoke chambers. Featuring a range of single and three phase pumps with vortex impellers and macerator cutting systems. Pumps are generally available in automatic for control via an integral float switch or manual to be controlled via an external control panel. Applications covered include ground, surface and foul water, with the emphasis on high quality and reduce life costs. Pumps fitted to standard products are removed using quick release couplings, larger pump stations have pumps on 'guide rail' system with simple removal via lifting chains. We offer a range of accessories fitted as standard to our pump stations as stand alone products when fitting pumps inside pre-cast chambers or concrete rings, including pipework, gate and non-return valves.

## V3, V4, V6 (FREE STANDING)



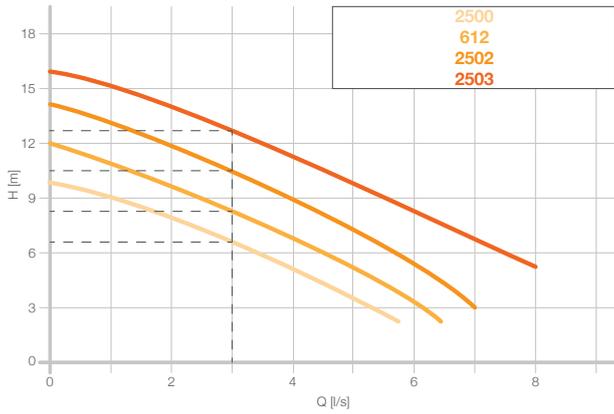
50Hz - 1 ~ 230V Discharge 1.25" BSP Female					
Model	P1 kW	P2 kW	In A	Part No.	Weight Kg
V3	0.43	0.18	1.9	116	5.64
V4	0.75	0.36	4.0	216	7.17
V6	1.05	0.50	4.9	084	7.40

## 2300 SERIES (FREE STANDING & GUIDE RAIL MOUNTED)



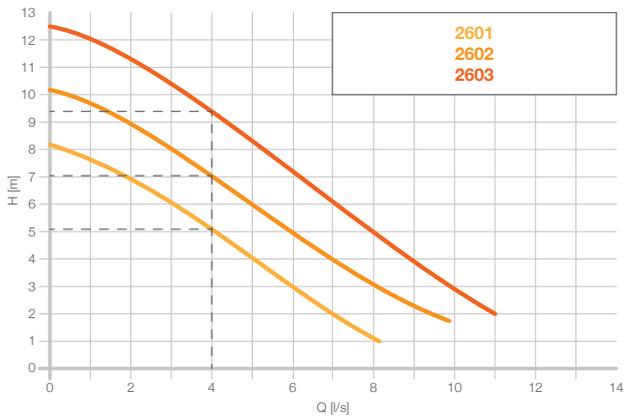
50Hz - 1 ~ 230V Discharge 1.25" BSP Female					
Model	P1 kW	P2 kW	In A	Part No.	Weight Kg
2308SA	0.36	0.22	1.6	PU-016	4.6
2308SM	0.36	0.22	1.6	PU-017	4.6
2309SA	0.80	0.55	3.4	PU-018	6.7
2309SM	0.80	0.55	3.4	PU-019	6.7

## 2500 SERIES (FREE STANDING & GUIDE RAIL MOUNTED)



50Hz - 1 ~ 230V Discharge 2" BSP Female					
Model	P1 kW	P2 kW	In A	Part No.	Weight Kg
2500SA	1.00	0.55	5.0		22
612SA	0.75	0.36	4.0	114	22
2502SA	1.05	0.50	4.9	PU-006	22
2503SA	1.90	1.10	8.2	PU-008	22
2500SM	1.00	0.55	5.0		22
612SM	1.25	0.75	6.0	PU-005	22
2502SM	1.80	1.10	8.2	PU-007	22
2503SM	1.80	1.10	8.2	PU-009	22
50Hz - 3 ~ 400V Discharge 2" BSP Female					
2500TM	0.90	0.55	2.3	Call	22
612TM	1.10	0.75	2.8	Call	22
2502TM	1.50	1.10	3.0	Call	22
2503TM	2.05	1.50	3.5	Call	22

## 2600 SERIES (GUIDE RAIL MOUNTED)



50Hz - 1 ~ 230V Discharge 2.50" BSP Female					
Model	P1 kW	P2 kW	In A	Part No.	Weight Kg
2601SA	1.25	0.75	6.0	PU-010	25
2602SA	1.80	1.10	8.2	PU-012	25
2603SA	1.80	1.10	8.2	PU-014	25
2601SM	1.25	0.75	6.0	PU-011	25
2602SM	1.80	1.10	8.2	PU-013	25
2603SM	1.80	1.10	8.2	PU-015	25
50Hz - 3 ~ 400V Discharge 2.50" BSP Female					
2601TM	1.10	0.75	2.8	Call	25
2602TM	1.50	1.10	3.0	Call	25
2603TM	2.05	1.50	3.5	Call	25

# STANDARD PUMP OVERVIEW



## V3, V4, V6

The V pump range is capable of pumping water containing up to 10mm of solids. These pumps are ideal for pumping ground and surface water but can be used for pumping grey water such as kitchen sinks, washing machines and showers. Groundwater and grey water should NEVER be mixed into the same chamber as this can lead to odours in the basement.



## 612, 2502, 2503

The 2500 series is capable of pumping foul waste and has a solids handling capacity of 45mm. These pumps are ideal for pumping foul waste in a basement or a small dwelling. The 2500 series pump has a range capable of pumping small to medium flow rate at small to medium heads. Both manual and automatic pump options are available to suit the desired pump installation.

## 2601, 2602, 2603

The 2600 series is capable of pumping foul waste and has a solids handling capacity of 60mm. These pumps are ideal for pumping foul waste in a basement or a whole dwelling. The 2600 series pump has a range capable of pumping small to medium flow rate at small to medium heads. Both manual and automatic pump options are available to suit the desired pump installation.



# TYPICAL FAQs FOR PUMP STATIONS



**Can foul and ground water be collected in the same pump station?**

No - building regulations state that grey water and ground/ surface water should be discharged from the dwelling separately.

**Can the surface water from a light well be collected in the ground water pump chamber?**

Yes - however, it is not recommended if light wells are larger than 12m<sup>2</sup>.

**Does a groundwater chamber need to have a vent pipe?**

No - the pump chamber can be vented through the delta membrane system.

**Can a Foul chamber vent through an internal soil vent pipe?**

Yes - although it is not recommended. If the foul chamber is vented through an internal soil vent pipe, a charcoal filter must be fitted and an air brick must be fitted to ventilate the room.

**Can the cable duct be used as a vent pipe?**

Yes - however, vent pipe design guidelines should be followed in building regs. Part H.

**What gradient should be used for Delta 129 detail pipework?**

Pipes should be laid at 1:100.

**Is it safe to discharge a swimming pool via a pump station?**

Yes - it is highly recommended that a cut-off switch is installed so the swimming pool pump turns off if a pump fails in the pump chamber.

**Does a grease trap need to be fitted when collecting waste water from a kitchen sink?**

Generally, a grease trap should be fitted if waste water is discharged from a kitchen sink.

**Can two pumps be connected to the same spur?**

No - each pump must be connected to a separate non-switched fused spur. This stops the power being cut to both pumps if one pump trips.

**What storage capacity is recommended in a pump station when no emergency storage is required?**

Typically, a drainage engineer will recommend a minimum storage volume of 250 litres.

**Can an anti-flood valve be fitted in the pipework between the delta membrane system and the pump chamber?**

No - If the valve has closed due to surface water flow into the sump resulting in backflow up the cavity drain, then flow within the cavity drain will be prevented from entering the sump, which could result in the cavity system leaking. Also the natural ventilation route for the sump would be blocked-off.

**Is it recommended to use an anti-flood loop?**

Yes - an anti-flood loop stops any water in the sewer from flowing into the chamber and potentially into the basement.

**How should discharge pipework be laid in the ground?**

The best case scenario is horizontal and vertical lengths with minimal bends. The pipework can be raised to the sewer level in a stepped form. However, it is not recommended for the pipework to continuously rise and lower as this can cause noise and air locks.

**How often should an inlet be taken from the perimeter channel to the chamber?**

The perimeter channel should maximum runs of 25m from the pump station.

# PIPEWORK

## PIPE, FITTINGS, VALVES



Material: PVC-U Class C	Pressure Rating @ 20°C	BS Rating
Pipe (Solvent Weld)	9 Bar	BSEN 1452
Fittings (Solvent Weld)	15 Bar	BS 4316 part 1
Fittings (Threaded)	12 Bar	BS21 ISO7 DIN 2119

	90° Bend		
	1.25"	2.00"	2.50"
	DMS-0145	DMS-0155	DMS-315

	Plain Socket		
	1.25"	2.00"	2.50"
	DMS-0147	DMS-0157	DMS-317

	Threaded/Threaded Socket		
	1.25"	2.00"	2.50"
	DMS-331	DMS-339	Call

	T Piece		
	1.25"	2.00"	2.50"
	DMS-318	DMS-212	Call

	Pipe		
	1.25"	2.00"	2.50"
	DMS-0144	DMS-0154	DMS-313

	45° Bend		
	1.25"	2.00"	2.50"
	DMS-0146	DMS-0156	DMS-316

	Plain/Threaded Socket		
	1.25"	2.00"	2.50"
	DMS-358	DMS-0161	Call

	Union		
	1.25"	2.00"	2.50"
	DMS-0148	DMS-0160	DMS-353

	Male Iron		
	1.25"	2.00"	2.50"
	DMS-0143	DMS-0153	DMS-314

	High Pressure Glue		
	500ml		
	DMS-0158		

	110mm Adapters		
	1.25"	2.00"	2.50"
	DMS-340	DMS-341	DMS-342

	Hose Tails		
	1.25"	2.00"	
	DMS-062	DMS-0155	

	Semi Rigid Hose		
	1.25"	2.00"	
	DMS-065	DMS-	

	Non-return Swing Check Valves		
	1.25"	2.00"	2.50"
	DMS-	DMS-327	Call

	Non-return Ball Valves		
	1.25"	2.00"	2.50"
	DMS-328	Call	Call

	Gate Valves		
	1.25"	2.00"	2.50"
	DMS-329	Call	Call

	110mm Saddle Clamps		
	1.25"	2.00"	
	DMS-0141	DMS-0151	

	160mm Saddle Clamps		
	1.25"	2.00"	
	DMS-0142	DMS-0152	

# MISCELLANEOUS SPARE PARTS



	Pendant Float Switch
	Supplied with 10m cable
	DMS-194

	Float Weight
	Suitable for use with pendant float switch
	DMS-295

	Replacement Claw
	Suitable for 2600 series pumps
	PUS-CL-K6

	Claw Adaptor Plate
	Suitable for 612 pump
	PUS-CA-DK

	Replacement Cable Harness
	Suitable for 2500 & 2600 series manual pumps
	PUS-HAR-02

	Broken Finger Float Switch
	Supplied with 10m cable
	DMS-276

	Replacement Claw
	Suitable for 2500 series pumps
	PUS-CL-K5

	Replacement Claw
	Suitable for 612, 308, 309 pumps
	PUS-CL-DSD2

	Replacement Cable Harness
	Suitable for 2500 & 2600 series automatic pumps
	DMS-195

	Extended Panel Aerial
	Suitable for MessageMaxx
	DMS-110

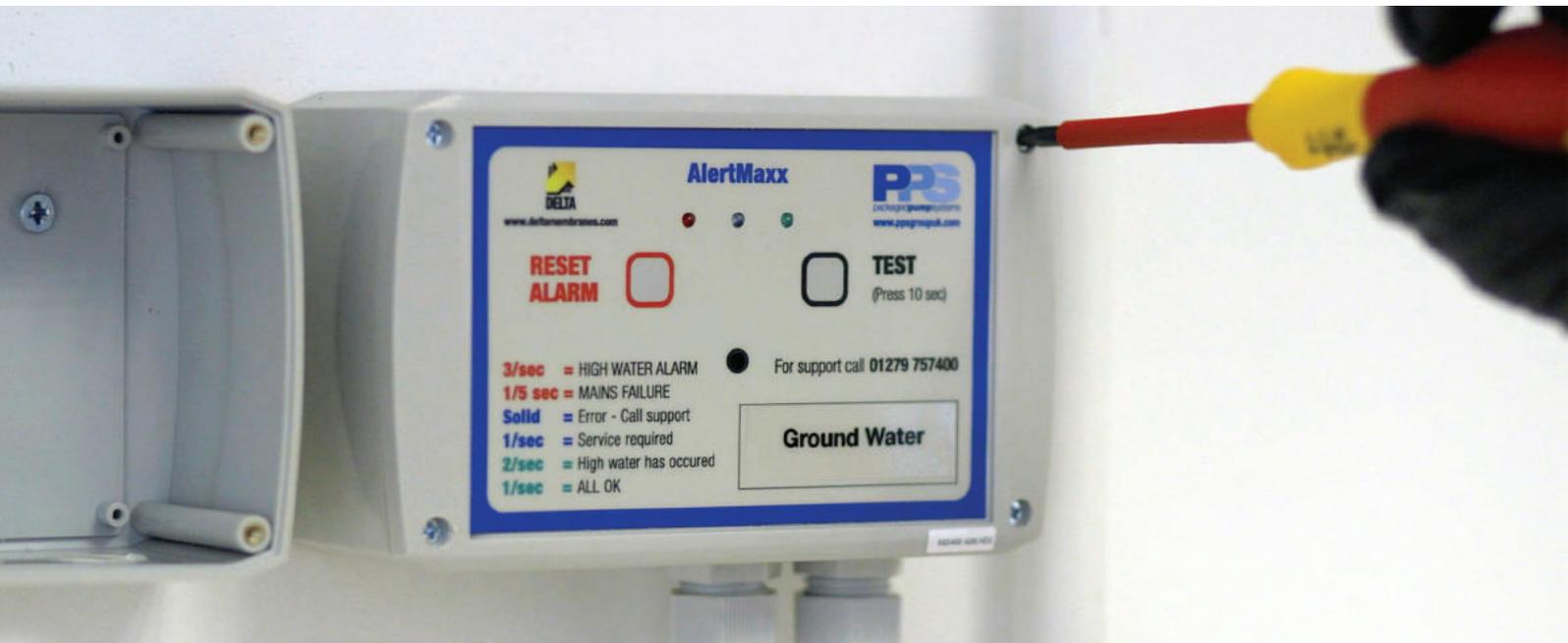
# COMMISSIONING & INSTALLATION



## OUR SERVICES

We offer installation & commissioning services to ensure all pump stations are handed over to the client in full working order. We work with contractors to ensure the process is as smooth as possible and we will always survey the site to make sure when our engineers attend everything is ready.

All our staff are fully trained and carry CSCS cards and are confined space trained. We work in accordance with the latest Health & Safety regulations. We are able to produce risk assessment & method statements prior to attendance.



## COMMISSIONING

Essentially fine checks to pump equipment installed by others, typically the main contractor. We make a full range of mechanical & electrical checks to ensure all settings are within the tolerance set by the manufacturer. On completion, a commissioning certificate will be issued which also re-starts the one year manufacturer's warranty.

## INSTALLATION

Our engineers visit site, install pumps into pump chambers, pull cables through ducts, mount electrical control panels, energise the system, test & commission. We are able to offer additional services which can be discussed at the pre-order meeting. Most site contractors see our engineers as an extension to their own operatives and we are keen to be flexible to ensure the work is completed within the schedule.

# SERVICE & MAINTENANCE CONTRACTS



## STANDARD SERVICE PLAN

- 2 services per year
- Priority call-outs for unplanned work
- 24/7 helpline
- Call-out labour included free of charge
- All replacement parts included free of charge
- From £52.00 per month\*

## BASIC SERVICE PLAN

- 2 services per year
- Priority call-outs for unplanned work
- 24/7 help line
- 10% discount on parts & labour
- From £42.00 per month\*

\*Prices based on two typical basement pump stations.



## WHAT IS A SERVICE?

- Test cable kits for moisture and corrosion (if applicable).
- Pump out chambers manually and monitor performance.
- Test all pumps in auto and manual, monitor performance.
- Check all float switches.
- Test/check non-return valves.
- Test/check high level alarm/replace batteries (if applicable).
- Check 240v supply.
- Swap pumps to ensure equal wear of both pumps.
- Check auto changeover for duplex panels.
- Carry out basic clean of chamber, pumps and float switches.
- Visual inspection of chambers, internal pipework and cables.
- Visual inspection for excessive fat/scale build up
- Adjust position of alarm activation float switch if required.
- Check position of pumps within chamber.
- Check position of pumps activation float switch(es).
- Final checks.

# After Sales Service

All Delta Membrane pump systems are fitted & can be maintained by our partners, Packaged Pump Systems. With our long-term relationship we ensure that the system selected is fit for your requirements, is delivered on time, professionally installed & offers hassle free on-going operation & maintenance.

- Fully stocked vans
- Emergency breakdown service
- Out of hours service
- Planned maintenance
- Factory trained engineers



## Precise Passionate Service

### Precise

Fully trained in-house service engineers to maintain, enhance & replace equipment.

### Passionate

Bespoke design, manufacturing & installation ensuring our equipment is fit for every requirement.

### Service

From fitting to scheduled maintenance, we ensure your needs come first.



Phone: 01992 523 523  
Fax: 01992 523 250  
Email: [info@deltamembranes.com](mailto:info@deltamembranes.com)



Phone: 01279 757 400  
Fax: 01279 210 109  
Email: [info@ppsgroupuk.com](mailto:info@ppsgroupuk.com)